IN THE CLAIMS

Please amend the claims as follows:

Claim 1 (Currently Amended): A transmitter for use with a multi-channel radio communication system, ~~and transmits~~ transmitting a radio frame to a receiver through ~~using at least one~~ available ~~channel~~ channels of the multi-channel radio communication system, ~~the transmitter~~ comprising:

a transmission media-access-control (MAC) unit that divides, when the transmitter transmits data using two or more channels of the multi-channel radio communication system, the data into the two or more ~~number of applying~~ channels ~~to be used~~, and generates transmission data in correspondence to ~~for~~ each of the two or more channels ~~using divided data~~ in divided fashion;

a radio-frame generating unit that generates a radio frame in correspondence to ~~that contains~~ each of the ~~transmission data~~ two or more channels; and

a transmission applying-channel notifying unit that inserts channel information to each one of the two or more channels to identify ~~for identifying~~ a respective channel of ~~into~~ each radio frame, wherein

the transmitter transmits each radio frame containing the channel information.

Claim 2 (Original): The transmitter according to claim 1, wherein

the transmission applying-channel notifying unit inserts the channel information into an unused area of transmission data generated by the transmission media-access-control unit.

Claim 3 (Original): The transmitter according to claim 1, wherein

the transmission applying-channel notifying unit inserts the channel information into a preamble of the radio frame.

Claim 4 (Currently Amended): The transmitter according to claim 1, wherein

the transmission applying-channel notifying unit notifies the channel information to the radio-frame generating unit, when the radio-frame generating unit generates the radio frame using the channel information, and

the radio-frame generating unit executes a predetermined transmission processing on each transmission data, and uses the channel information for an initial value of a scramble processing corresponding to as ~~one of~~ the predetermined transmission processing, when generating the radio frame.

Claim 5 (Original): The transmitter according to claim 1, wherein

the radio-frame generating unit includes an encoding unit that encodes the transmission data contained in the radio frame,

the transmission applying-channel notifying unit inserts the channel information into an encoding-unit initializing section for initializing the encoding unit within the radio frame, and

the radio-frame generating unit initializes the encoding unit at a timing when an input of a pattern of the encoding-unit initializing section to the encoding unit is completed.

Claim 6 (Previously Presented): The transmitter according to claim 1, wherein

the transmission media-access-control unit checks a reception state of a plurality of channels, and determines the applying channel based on a result of the check.

Claim 7 (Currently Amended): The transmitter according to claim 1, wherein

the channel information includes at least one of an identical frame mark for identifying whether a radio frame received by ~~the~~ a receiver is addressed to a local apparatus

and applying-channel-number information indicating a channel number of the applying channel.

Claim 8 (Currently Amended): The transmitter according to claim 7, wherein the applying-channel-number information includes information indicating ~~an~~ a division order of transmission frames generated by the transmission media-access-control with respect to the multi channel radio communication system ~~unit by dividing transmission data~~.

Claim 9 (Previously Presented): The transmitter according to claim 3, wherein the transmitter is a wireless local-area-network transmitter, and the channel information to be inserted into the preamble is a special preamble pattern obtained by inverting a polarity of a part of either one of a short training symbol or a long training symbol that constitute a preamble of the wireless local-area-network frame.

Claim 10 (Currently Amended): A receiver for use with a multi-channel radio communication system, ~~which receives~~ receiving a radio frame from a transmitter ~~in~~ of the radio communication system using ~~at least one~~ available ~~channel~~ channels of the multi-channel radio communication system, ~~the receiver~~ comprising:

a receiving unit that receives two or more channels of divided transmission data and generates reception data by performing a predetermined reception processing on respective ~~the~~ radio ~~frame received from~~ frames of the two or more channels, each radio frame ~~which has been received~~ containing ~~the~~ channel information to identify a corresponding one of the two or more channels;

a reception applying-channel notifying unit that extracts reception data addressed to a local apparatus based on either one of information extracted by the reception processing or channel information contained in the reception data; and

a reception media-access-control unit (MAC) that generates a reception frame by reassembling an original transmission frame from the reception data extracted by the reception applying-channel notifying unit.

Claim 11 (Previously Presented): The receiver according to claim 10, wherein

the receiving unit executes a descramble processing as the predetermined reception processing, and outputs an initial value extracted by the descramble processing to the reception applying-channel notifying unit.

Claim 12 (Previously Presented): The receiver according to claim 10, wherein

the receiving unit executes a demodulation processing as the predetermined reception processing, and outputs at least one of a preamble generated by the demodulation processing and data of an encoding-unit initializing section contained in demodulated data to the reception applying-channel notifying unit.

Claim 13 (Currently Amended): A radio communication apparatus for use with a mult-channel radio communication system, ~~and communicates~~ communicating with other radio communication apparatus ~~in~~ of the radio communication system using ~~at least one~~ available ~~channel, the~~ channels of the multi-channel, ~~the radio communication apparatus~~ comprising:

a transmitter that includes

a transmission media-access-control (MAC) unit that divides, when the transmitter transmits data using two or more channels of the multi-channel radio communication system, the data into the two or more ~~number of applying~~ channels ~~to be used~~, and generates transmission data in correspondence to ~~for~~ each of the two or more channels ~~using divided data~~ in divided fashion;

a radio-frame generating unit that generates a radio frame in correspondence to ~~that contains~~ each of the ~~transmission data~~ two or more channels; and

a transmission applying-channel notifying unit that inserts channel information to each one of the two or more channels to identify ~~for identifying~~ a respective channel of ~~into~~ each radio frame, wherein

the transmitter transmits each radio frame containing the channel information; and

a receiver that includes

a receiving unit that receives two or more channels of divided transmission data and generates reception data by performing a predetermined reception processing on respective ~~the~~ radio ~~frame received from~~ frames of the two or more channels;

a reception applying-channel notifying unit that extracts reception data addressed to a local apparatus based on either one of information extracted by the reception processing or channel information contained in the reception data; and

a reception media-access-control unit (MAC) that generates a reception frame by reassembling an original transmission frame from the reception data extracted by the reception applying-channel notifying unit.

Claim 14 (Original): The radio communication apparatus according to claim 13, wherein

the transmission applying-channel notifying unit inserts the channel information into an unused area of transmission data generated by the transmission media-access-control unit, and

the reception applying-channel notifying unit extracts the channel information from the reception data.

Claim 15 (Currently Amended): The radio communication apparatus according to claim 13, wherein

the transmission applying-channel notifying unit notifies the channel information to the radio-frame generating unit, when the radio-frame generating unit generates the radio frame using the channel information,

the radio-frame generating unit executes a predetermined transmission processing on each transmission data, and uses the channel information for an initial value of a scramble processing corresponding to as ~~one of~~ the predetermined transmission processing, when generating the radio frame, and

the receiving unit executes a descramble processing as the predetermined reception processing, and outputs an initial value extracted by the descramble processing to the reception applying-channel notifying unit.

Claim 16 (Previously Presented): The radio communication apparatus according to claim 13, wherein

the transmission applying-channel notifying unit inserts the channel information into a preamble of the radio frame, and

the receiving unit executes a demodulation processing as the predetermined reception processing, and outputs a preamble generated by the demodulation processing to the reception applying-channel notifying unit.

Claim 17 (Previously Presented): The radio communication apparatus according to claim 13, wherein

the radio-frame generating unit includes an encoding unit that encodes the transmission data contained in the radio frame,

the transmission applying-channel notifying unit inserts the channel information into an encoding-unit initializing section for initializing the encoding unit within the radio frame,

the radio-frame generating unit initializes the encoding unit at a timing when an input of a pattern of the encoding-unit initializing section to the encoding unit is completed, and

the receiving unit executes a demodulation processing as the predetermined reception processing, and outputs data of an encoding-unit initializing section contained in demodulated data to the reception applying-channel notifying unit.

Claim 18 (Previously Presented): The radio communication apparatus according to claim 13, wherein

the transmission media-access-control unit includes a unit which checks a reception state of a plurality of channels, and determines the applying channel based on a result of the check.

Claim 19 (Original): The radio communication apparatus according to claim 13, wherein

the channel information includes at least one of an identical frame mark for identifying whether a radio frame received by the receiver is addressed to a local apparatus and applying-channel-number information indicating a channel number of the applying channel.

Claim 20 (Currently Amended): The radio communication apparatus according to claim 19, wherein

the applying-channel-number information includes information indicating ~~an~~ a division order of transmission frames generated by the transmission media-access-control with respect to the multi channel radio communication system ~~unit by dividing transmission data~~.

Claim 21 (Previously Presented): The radio communication apparatus according to claim 16, wherein

the transmitter is a wireless local-area-network is, transmitter, and the channel information to be inserted into the preamble is a special preamble pattern obtained by inverting a polarity of a part of either one of a short training symbol or a long training symbol that constitute a preamble of the wireless local-area-network frame.